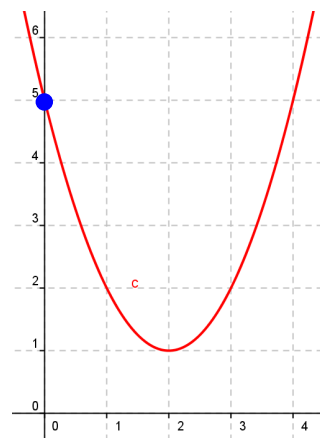


Modelling Quadratics Using Vertex Form

- 1) Sketch the parabola, if possible
- 2) Identify the key properties
- 3) Sub vertex (h, k) into $y = a(x - h)^2 + k$
- if vertex is not given, use symmetry
- 4) Sub any other point to find a
- 5) Does your answer make sense?

Apr 18-3:11 PM

Ex.1. Determine the equation in vertex form.



Apr 22-8:51 PM

Ex.2 State the equation of the parabola obtained by applying these transformations to the graph of $y = x^2$.

- a vertical stretch by a factor of 5
- a vertical shift of 9 units

Apr 22-9:09 PM

Ex.3 Write an equation for the parabola that has a vertex at $(-3, 5)$, no zeros, and is wider than $y = x^2$.

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Ex.4 Find the equation of the quadratic that passes through the points $(-3, 2)$, $(5, 2)$ and $(7, 4)$.

Apr 22-9:25 PM

Assigned Work: p. 280 # 1, 2ace, 3ace, 4, 5ace, 6cd, 7b, 8 (w/ diagram), 10, 15